Activity-01

1. **[****3 points]** Explain the annotations @IBOutlet and @IBAction? When do we use @IBOutlet and @IBAction?

An IBOutlet (Interface Builder outlet) is a variable which is a reference to a UI component.

An IBAction (Interface Builder action) is a function which is called when a specific user interaction occurs.

You want work to happen when you hit a button? You create an IBAction and define the work inside of it.

You want to manipulate that button (change its title, round its corners, change its color, add a border, hide it) from code? Then you need an IBOutlet.

1. **[3 points]** Why is Swift a strongly typed language, explain with an example?

Swift is strongly typed. Whenever you use a variable or pass something as a function argument, Swift checks that it is of the correct type. You can’t pass a string to a function that expects an integer etc. Swift does this check at compile time.

Example:

func adder(x=Int, y = Int) -> Int{

return x + y

}

adder(1, y = 3). //4

adder(1.0, y = 3.0) //Error

1. **[3 points]** Write a function that takes an array of integers and returns both sum and average of the numbers in the array?

var arrays:[Double] = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

func average(nums: [Double]) -> Double {

var total = 0.0

for array in nums{

total += Double(array)

}

let arraysTotal = Double(nums.count)

var average = total/arraysTotal

return average

}

var theAverage = average(arrays)

1. **[3 points]** Write logic in swift that finds if the given customer is present in the dictionary or not? The keys are customer name and the values are total no of orders by that customer.

var customers = ["john":4,"Jack":10,"Ajay":30,"patt":20]

var search ="john"

**Note:** Search string is **john** and it is in the customers dictionary.

Print “**Not Found**” if customer is not found.

If Customers.keys.contains(“john”){

print(“Customer john found and has 4 orders”)

}

else

{

print(“Not Found”)

}

**Ouput:**

Customer john found and has 4 orders

1. **[13] points** Create a project in XCode with the name “**LastName\_CurrencyConverter**”.
2. Design an app that converts the Indian currency (INR) to US Dollars (USD) and vice versa.
3. Application should take the amount in INR and USD and convert the amount into USD and INR respectively.
4. Refer the below screenshots for the output format to be shown. Consider 1 USD = 74.64 INR

**Note: Make sure you round of the values to two decimals places**

 

